

ORDER

1380.34A

STAFFING STANDARDS PROGRAM



November 7, 1983

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

RECORD OF CHANGES

DIRECTIVE NO.


1380.34A

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FOREWORD

The order sets forth agency policy, responsibilities, and approval authority to assure compliance with criteria defining specific types of staffing standards used within program areas to determine and properly allocate human resources.

The material in this order provides guidance and direction to all program areas currently involved with existing staffing standards and those considering future efforts.



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CHAPTER 1. GENERAL

1. PURPOSE. This order sets forth agency criteria, development, policy, responsibility, use, and implementing procedures regarding the staffing standards program.
2. DISTRIBUTION. This order is distributed to the division level in Washington headquarters, regions, centers, and a limited distribution to all field offices and facilities.
3. CANCELLATION. Order 1380.34, FAA Staffing Standards Program, of December 17, 1974, is canceled.
4. EXPLANATION OF CHANGES. Order 1380.34, FAA Staffing Standards Program, has been revised to reflect the concerns expressed in the Regional Organization Task Force report. Chapter 1, paragraph 9 (RESPONSIBILITIES), provides an improved delineation of responsibilities between the program areas and the Office of Management Systems. The same paragraph also provides for an overview committee, when needed, to give guidance and direction to staffing standards efforts. A new chapter on criteria for staffing standards was added to assure minimum levels of quality not addressed in the current order and to provide a more concise basis from which standards can be evaluated and classified. A chapter on developing staffing standards was added to aid organizations toward producing standards which satisfy the criteria in chapter 2. Finally, there is a chapter on maintenance procedures for staffing standards and a listing of some of their practical uses.
5. DEFINITION. A staffing standard is a mathematical model, equation, or compilation of work times that expresses the staffing requirements for a homogeneous function in terms of employee-hours or employee-years. A staffing standard is based upon specific work units required of trained, skilled, and experienced personnel working at a normalized pace, plus personal, fatigue, and delay allowance; allowance for leave, holidays, and training; and any other necessary administrative activities to accomplish a function using a standardized process, method, system, or procedure.
6. OBJECTIVE. The objective of the staffing standards program is to develop, for agency programs, staffing standards of the highest quality commensurate with technical feasibility and costs. As a general rule, standards will be made applicable to the lowest practical level where they can provide a useful service within a reasonable cost.
7. POLICY.
 - a. A staffing standard study should be initiated only after a reasonable effort has been made to determine what work functions should be performed and in what priority.

b. Staffing standards are established as the basic method of determining, analyzing, and distributing employee resources for the program covered. Staffing standards shall be used, as published, in the development and review of staffing requests. This does not limit existing delegations of authority to regional and center directors to request staffing or use assigned staffing. Requests that vary significantly from the level supported by the standards, however, require specific justification. Allowable deviations will be prescribed for each standard developed. Since availability of resources is not fully within agency control, staffing standards do not guarantee that the personnel complement supported by the standards will be obtained.

c. Staffing standards provide guidance to regional and center directors and their staffs in the distribution of resources among individual facilities and programs. The application of standards is intended to be flexible. Since regional and center directors and their staffs have first-hand knowledge of local operations and needs, they are in the best position to allocate assigned staffing rather than depend on rigid application of the standards. However, in distributing staffing, significant variations (5% for an engineered standard; 10% for a statistical standard) from standards shall be explained since collectively they may indicate a need to revise or refine a standard.

d. Except for unique local situations; e.g., a unique piece of equipment, where staffing deviations are allowable within existing delegations of authority, staffing standards shall be developed and applied on a uniform national basis.

8. SCOPE.

a. New staffing standards shall be developed on a program basis to coincide with budget and cost center structure. In most instances, the program responsibility and organizational structure coincide so that program standards will completely cover organizational elements. Modifications to a standard will be published as a change to, or updated revision of, the original standard. Generally, standards will be structured to cover only one of the three basic organizational levels; i.e., field, region/center, and Washington headquarters.

b. Wherever feasible, standards shall be structured to provide visibility of staffing components for program effort, administrative support, managerial overhead, and any other significant factors.

c. A program or activity is considered technically receptive to coverage by staffing standards if its services can be expressed in explicit units. In considering the need for a standard, its value must be weighed relative to the developmental costs and the number of personnel to be covered by the standard.

d. The workload indicators selected as bases for the development of standards should be related to readily measurable actions and existing records. They should be selected to minimize the need for new and extensive records and reporting systems, although in some instances it may be necessary to develop supporting data systems.

e. Evaluations of staffing standards are to be made both on a continuous and periodic basis to assure that standards are both accurate and current, in accordance with responsibilities assigned in paragraphs 9, 21, and 40.

9. RESPONSIBILITIES.

a. Overview Committee.

(1) An overview committee may be established for any staffing standard effort at the request of the program area associate administrator or service director and/or the Associate Administrator for Administration with concurrence of the Deputy Administrator.

(2) If convened, the overview committee or its appointed representative(s) will function as a steering committee for new staffing standard efforts providing guidance and direction when necessary. Additionally, the overview committee or its appointed representative(s) will act as an arbitrator for any staffing standard effort requiring an objective decision regarding points of contention that cannot be resolved by the affected parties.

(3) The overview committee will consist of the following:

- (a) Deputy Administrator.
- (b) The Associate Administrator for Administration.
- (c) The associate administrator in the affected program area.
- (d) The Director of Management Systems.
- (e) The director in the affected program area.
- (f) A regional director.

b. Office of Management Systems.

(1) Exercises primary agency responsibility for the staffing standards program, including development, implementation, and program evaluation.

(2) Participates jointly with the program office in the development of standards, recommending the approach and methodology to be used along with input regarding the type of data, system of data collection, reporting, and systems support required to maintain the standards.

(3) Jointly reviews and recommends approval, disapproval, or modification of proposed staffing standards or changes to existing standards to the appropriate reviewing and approving officials as set forth in paragraph 10.

(4) Consults with the Office of Budget, the Office of Personnel and Training, the Office of Labor Relations, and the Office of Aviation Policy and Plans in order to assure reflection of their interests in project planning and standards development.

(5) Analyzes staffing requirements, including continuous monitoring and periodic revalidation studies, to assure that standards are current and accurate, and to evaluate productivity changes resulting from new work methods, procedures, organization, or equipment.

(6) Provides liaison for the agency with the Office of the Secretary of Transportation (OST) and the Office of Management and Budget (OMB) on matters relating to staffing standards.

(7) May initiate proposals for the development of new staffing standards and for the modification of existing standards.

(8) Classifies standards by criteria contained in chapter 2 to indicate whether standards should be called engineered standards, statistical standards, or staffing guides.

c. Organization to Which Standards Apply. The office, service, or other organization responsible for the program to which the standards will apply:

(1) Participates jointly with the Office of Management Systems in the development of standards, providing guidance concerning its activities and operations, along with input regarding the type of data, formulation of methodologies, system of data collection, reporting, and systems support required to maintain the standards.

(2) Jointly reviews and recommends approval, disapproval, or modification of proposed staffing standards or changes to an existing standard to the appropriate reviewing and approving officials as set forth in paragraph 10.

(3) Participates in the coordination of new staffing standards and changes to existing standards with the Office of Management Systems, the Office of Budget, the Office of Personnel and Training, the Office of Labor Relations, the Office of Aviation Policy and Plans, and regional and center directors.

(4) May initiate proposals for the development of new staffing standards and for the modification of existing standards.

(5) Applies approved standards in its management processes, specifically in the determination of staffing requirements for forecasted levels of workload activity, in budget submissions, and in budget execution, assuring that there is consistency between program guidance, emphasis, and recommendations on resource levels and distribution.

(6) Continuously evaluates its program staffing standards through reviews of reported data, identification of system changes, and other evaluational efforts, advising the Office of Management Systems of significant trends, and, if applicable, indications of possible need for standard modifications.

d. Office of Budget.

(1) Participates in the development or revalidation of staffing standards to the degree necessary to assure that they are suitable for use in the agency budget process.

(2) Maintains sufficient knowledge of standards in each program area so that they can be defended, if necessary, during OST and OMB reviews.

(3) Identifies and recommends program areas in which standards need to be developed, revised, or refined to provide better support to budget requests.

(4) Reviews proposed staffing standards or changes to existing standards, providing their comments to the Office of Management Systems and the affected program office.

(5) Integrates approved standards into the budget formulation and execution systems.

(6) Uses approved standards in the evaluation of resource requirements.

e. Office of Personnel and Training.

(1) Participates in the planning of projects to develop new staffing standards to the extent necessary to assure that the staffing standards and their systems support requirements are compatible with personnel management systems.

(2) Reviews new staffing standards and changes to existing standards to assess their impact on personnel programs.

f. Office of Labor Relations.

(1) Participates in the planning of projects to develop new staffing standards to the extent necessary to assure that labor relations considerations are suitably recognized.

(2) Maintains liaison, as appropriate, with recognized labor organizations with respect to staffing standards development and application and arranges for consultation when required.

(3) Reviews new staffing standards and changes to existing standards to assess their impact from the viewpoint of employees and recognized labor organizations.

g. Office of Aviation Policy and Plans.

(1) Participates in the planning of projects to develop new staffing standards to the extent necessary to assure that the staffing standard system, the aviation forecasting system, and the agency's planning processes are compatible.

(2) Assures, when appropriate, that official agency forecasts can be used in the application of existing staffing standards.

(3) Reviews new staffing standards and changes to existing standards for consistency with agency policies and plans.

h. Regional and Center Directors.

(1) Apply staffing standards as the primary basis for justifying employee resources in the budget process and provide justification for staffing requests which vary significantly from the regional or center total allowed by the standard for each program.

(2) Use approved staffing standards as a baseline or reference in the distribution of resources among regional program elements and provide an explanation of deviations significantly different from that allowed by the standard.

(3) Use approved staffing standards to evaluate the impact of local environmental changes on staffing requirements and to evaluate the use of staffing by field activities.

(4) Identify the need for changes in staffing standards through formal feedback processes or through local evaluation of the use and impact of the standards. Provide results of such evaluations to the Office of Management Systems and the office, service, or other organization having primary interest in the standard.

(5) Maintain liaison, as appropriate, with recognized labor organizations with respect to staffing standards development and application matters and arrange consultations when required.

(6) Review new national staffing standards and changes to existing national standards to assess their impact on program operation.

(7) Develop staffing standards for unique local programs with the support of the regional or center Management Systems organization. Coordinate the initiation, progress, and results of local staffing standards studies with the Office of Management Systems and the office, service, or other organization having primary interest in the standard.

(8) Provide staffing and assistance through the regional or center Management Systems organization and other staff, as appropriate, to national staffing standards efforts.

i. Field Activity Managers.

(1) Participate, as requested, in the development of staffing standards to assure that staffing standards have local applicability.

(2) Apply approved staffing standards to develop and support field budget requests. Collaborate with the regional office in identifying and evaluating unique local factors which may require staffing levels different than that provided by the standard.

10. APPROVAL OF STAFFING STANDARDS.

a. National Staffing Standards.

(1) If an overview committee is convened, then the Office of Management Systems and the office or other organization responsible for the program to which the standard applies shall jointly present for review, by the designated overview committee, all new staffing standards and all changes to existing standards. If the overview committee concurs with the standard, and the service area or program office has a current personnel complement of 10% or more of the agency's authorized employment, and the committee considers the standard to have a major staffing impact, then the standard is forwarded to the Administrator for final approval or disapproval. If the overview committee concurs with the standard and the service area or program office has a current personnel complement of less than 10% of the agency's authorized employment, or the committee considers the standard to have a minor staffing impact, AAD is authorized to exercise final approval or disapproval of the standard.

(2) If an overview committee is not convened, then the responsibilities and considerations given the overview committee in paragraph 10(a)1 and approval authority are assigned to the Associate Administrator for Administration and the program or service area associate administrator.

b. Regional and Center Staffing Standards.

(1) After coordination, as prescribed by paragraph 9h(7), staffing standards, and changes thereto, which are unique to a single region or center or portion thereof, shall be approved by the regional or center director.

(2) One copy of the regional or center directive and one copy of the study report shall be transmitted to the Office of Management Systems, and one copy shall be provided to the office, service, or other organization having primary interest in the program covered by the standard or revision.

c. Issuance of Standards. All staffing standards, and changes thereto, shall be published in an order in the 1380 series and signed by the official authorized to approve the standard or change.

d. Central Listing and Files. A central listing of all approved standards and file copies of all staffing standards study reports shall be maintained by the Office of Management Systems.

11.-19. RESERVED.



CHAPTER 2. CRITERIA

20. TYPE OF STAFFING STANDARD OR GUIDE.a. A standard is engineered if:

- (1) It is built by the application of standard time data, predetermined time systems, time study, work sampling, or a combination of these techniques.
- (2) The work unit description precisely defines the required work unit(s) content and is written at a level of detail necessary for the application of work measurement techniques.
- (3) Measurements are conducted onsite, utilizing approved industrial engineering work measurement techniques; e.g., predetermined time system, time study, work sampling, or a combination of these techniques.
- (4) Work unit measurements have a maximum error of +5% with a 95% confidence level.
- (5) The number of measurement sites are in accordance with paragraph 34.
- (6) Pace and allowance factor adjustments are applied during work measurement.
- (7) The backup data for the standard show methods, work units, and documentation of the technique used.

b. A standard is statistical if:

- (1) It is based on approved work measurement techniques. The basis for these standards can range from engineered standards development efforts which do not meet the accuracy requirements to studies using less rigorous self-reporting techniques.
- (2) The work unit description precisely defines the required work unit(s) content and is written at a level of detail necessary for the application of work measurement techniques.
- (3) Measurements are conducted onsite or offsite, utilizing work measurement techniques; e.g., time study, work sampling, fractioned professional estimate etc.
- (4) Work unit measurements should have a maximum error of +10% with a 95% confidence level.
- (5) The number of measurement sites are in accordance with paragraph 34.
- (6) Pace and allowance factor adjustments may be applied during work measurement.
- (7) The backup data for the standard show work units and documentation of the techniques used.

c. An effort is a staffing guide if:

(1) It is primarily developed through evaluation of planning and programming data, staff estimates, contractor estimates, historical data, and other similar data sources. These data may be supported by onsite measurements or inquiries.

(2) The work function description defines the functional area, in general terms, that expands on the required work content or scope statement for the function.

(3) Measurements are conducted onsite or offsite; e.g., validated employee-hour accounting data, historically recorded source data, self-reported data, etc.

(4) The number of measurement sites are in accordance with paragraph 34.

(5) If Correlation and Regression Analysis is used, it must satisfy the following parameters:

(a) $R^2 \geq .50$

(b) Coefficient of Variation $\geq .30$

(c) $F > F_{.90, M-1, N-M}$

(d) $t > t_{.90, N-M}$

(6) Staffing guides serve a useful purpose in setting up estimates of staffing requirements where engineered or statistical standard development is not practical or feasible; i.e., when there is a lack of experience with new systems or when standards may be short-lived due to system changes and phaseout. These estimates express requirements from a historical or actual experience standpoint.

21. VALIDATION OF STAFFING STANDARD OR GUIDE. A field test of a new standard at a predetermined number of sites will be conducted jointly by the originating organization and the Office of Management Systems. Any problems noted during the test will be jointly resolved to assure compliance with this order.

22.-29. RESERVED.

CHAPTER 3. DEVELOPMENT

30. DEFINITION OF THE PROBLEM. The first step in any scientific investigation or research study is to define or clarify the problem. This step is necessary to prevent compiling a large quantity of data which offers no solution to the current problem or to preclude producing final results which are irrelevant and useless. Defining the problem means more than composing a clear, concise statement of its meanings. It means explaining and interpreting its implications, understanding its effect, determining its importance to management, and suggesting tentative solutions. Defining the problem also includes obtaining answers to related questions, such as how accurate the results can be and how long management can wait for the results. The answer to the first question influences the size of the sample (if used) and the selection of work measurement methods or techniques. The answer to the second question aids in determining the scope of the study. Additionally, when there are indications that it may be cost efficient, the use of outside contractors should be considered.

31. FAMILIARIZATION. The analyst(s) must research the directives that govern the functions to become familiar with the mission, management relationships, and internal organizational structure of the function. Other helpful techniques include, but are not limited to:

- a. Obtaining reports of previous studies conducted in the functional area; i.e., management engineering studies, Inspector General reports, and management analysis reviews.
- b. Reviewing staffing authorization documents.
- c. Analyzing position descriptions.
- d. Obtaining examples of forms and reports used within the function.
- e. Investigating applicable Management Information Systems.
- f. Reviewing organization chart(s).
- g. Contacting program managers, major staffing users, and technical experts in the functional area.
- h. Visiting facilities/offices where the functions are actually performed.
- i. Distributing questionnaires.
- j. Reviewing any other related material which would aid in further understanding the area or functions concerned.

32. IDENTIFICATION OF WORK UNITS. When feasible, work units will be defined for the functional area(s) under consideration. Well chosen work units should be:

- a. Directly related to the time and effort expended on the associated task.
- b. Economical and convenient to report and use.
- c. Mutually exclusive.
- d. Receptive to audit, so that the work unit accuracy can be readily verified.
- e. Readily understood by those who plan, schedule, and control the work.
- f. Clearly identifiable when work is in progress or has been completed.
- g. Helpful in indicating specific opportunities for management improvement.
- h. Standardized in terms of the methods or procedures required for their accomplishment.

33. SELECTING APPROPRIATE WORK MEASUREMENT METHODS. Throughout the planning process, analyst(s) must continuously evaluate potential work measurement methods. Selection of which measurement method to use depends on the following considerations:

- a. Nature of work being accomplished.
- b. Work environment; i.e., layout, schedule, etc.
- c. Shift requirements/activities.
- d. Number of persons to be measured.
- e. Amount of staff and time available to do the measurement.
- f. Length of work cycle.
- g. Accuracy or type of standard desired.

34. SELECTION OF LOCATIONS FOR MEASUREMENT.

a. The primary requirement of locations selected is that the sample be representative of the population from which it is drawn. Examples of recognized sampling plans are:

(1) Systematic sampling. A method in which a regularly ordered interval is maintained between items chosen; e.g., choosing every tenth record.

(2) Random sampling. Each location in the population must have an equal probability of being selected for the sample.

(3) Stratified sampling. Similar to random sampling except that prior to drawing the samples, the population is divided into strata (by some characteristic; i.e., size, work unit, etc.). Once the population has been stratified, activities are selected randomly from each stratum.

b. Proper selection of locations should also satisfy the following conditions:

(1) A sufficient percentage of locations must be included in the measurement to ensure adequate coverage across the range of work units.

(2) The locations selected must be representative in terms of workload, and the range of activities covered should be evenly distributed.

(3) If activities considered unique are to be studied, then they will be automatically included in the sample selection.

(4) The sites selected must be representative of the variations among locations to ensure that possible differences can be analyzed.

(5) Activities found to have variations in procedures will be identified in the selection of measurement sites.

c. Travel costs will be estimated after the initial selection. Alternate sites should be selected to reduce travel expenditures only when their selection does not bias or impair the representativeness of the sample.

35. THE MEASUREMENT PLAN. The quality of a measurement plan is determined by the manner in which it addresses the truly essential elements of the study; i.e., what is to be measured and how it is to be measured. It is difficult to prescribe the contents for a measurement plan that would provide precisely the right amount of information. Differences such as the number of individuals involved, geographical scope, complexities of the function, and the existence or lack of a prior study, all have a bearing on both the items of information required and the degree of detail that must be reflected in each. It is, therefore, essential that the steps given previously be carefully considered in order to ensure that the adopted plan satisfactorily accomplishes the assigned task.

36.-39. RESERVED.



CHAPTER 4. MAINTENANCE AND APPLICATION

40. MAINTENANCE OF STAFFING STANDARD OR GUIDE.

a. Once the initial development of a standard has been completed and has been officially approved, it must be continuously maintained in a current status. Staffing standards become outdated when the statistical accuracy limits are exceeded or when changes occur within the function in one or more of the following:

- (1) Mission or operational environment.
- (2) Organization due to functional realignment/consolidation.
- (3) Program priorities and/or work functions.
- (4) Systems or procedures.
- (5) Technology or equipment.
- (6) Personnel qualification or classification.
- (7) Personnel mix.
- (8) Significant differences between standard and actual staffing not attributable to temporary budget restraints.

b. In addition to the continuing review of standards, the Office of Management Systems will initiate, in coordination with the program office, an official review of the currency of their standard(s) at least once every 2 years. This review will include, as a minimum, an evaluation of the currency of the standard work units. Additionally, the review should consider the impact on the standards attributable to those changes cited in paragraph 40a. If the standard is found to be in compliance with this order, then a jointly written letter stating such will be placed on file with both the Office of Management Systems and the responsible organization. If the review indicates the standard is not in compliance, a plan consisting of recommendations for updating the standard, along with the rationale for those recommendations, should be drawn up and accomplished within 6 months.

41. USE. Staffing standards within the FAA have traditionally been used to allocate human resources, but standards can and should be used for various internal management processes, some of which are:

- a. The assignment of work on an efficient, equitable, and impartial basis.
- b. The development of effective shift schedules.
- c. The identification of need for training or for procedural changes to improve performance.

- d. The identification of outstanding performance of individuals or groups.
- e. The determination of staffing impact for proposed changes in programs.
- f. The assessment of impact of enforced budgetary restrictions on program accomplishments.
- g. The improvement of human relations.
- h. Planning for future staffing requirements.
- i. The impact of changes in methods, procedures, and equipment.

42.-49. RESERVED.